

- [22] D. Lehmann and M. Pradel, “Wasabi: A framework for dynamically analyzing webassembly,” in *Proceedings of the Twenty-Fourth International Conference on Architectural Support for Programming Languages and Operating Systems*, pp. 1045–1058, 2019.
- [23] D. Lehmann, M. T. Torp, and M. Pradel, “Fuzzm: Finding memory bugs through binary-only instrumentation and fuzzing of webassembly,” *arXiv preprint arXiv:2110.15433*, 2021.
- [24] C. Watt, J. Renner, N. Popescu, S. Cauligi, and D. Stefan, “Ct-wasm: Type-driven secure cryptography for the web ecosystem,” *Proc. ACM Program. Lang.*, vol. 3, jan 2019.
- [25] Q. Stiévenart, D. Binkley, and C. De Roover, “Dynamic slicing of webassembly binaries,” in *39th IEEE International Conference on Software Maintenance and Evolution*, IEEE, 2023.
- [26] Q. Stiévenart, D. W. Binkley, and C. De Roover, “Static stack-preserving intra-procedural slicing of webassembly binaries,” in *Proceedings of the 44th International Conference on Software Engineering, ICSE ’22*, (New York, NY, USA), p. 2031–2042, Association for Computing Machinery, 2022.
- [27] K. Haßler and D. Maier, “Wafi: Binary-only webassembly fuzzing with fast snapshots,” in *Reversing and Offensive-oriented Trends Symposium*, pp. 23–30, 2021.
- [28] M. Musch, C. Wressnegger, M. Johns, and K. Rieck, “New kid on the web: A study on the prevalence of webassembly in the wild,” in *Detection of Intrusions and Malware, and Vulnerability Assessment: 16th International Conference, DIMVA 2019, Gothenburg, Sweden, June 19–20, 2019, Proceedings 16*, pp. 23–42, Springer, 2019.
- [29] R. K. Konothe, E. Vineti, V. Moonsamy, M. Lindorfer, C. Kruegel, H. Bos, and G. Vigna, “Minesweeper: An in-depth look into drive-by cryptocurrency mining and its defense,” in *Proceedings of the 2018 ACM SIGSAC Conference on Computer and Communications Security*, pp. 1714–1730, 2018.
- [30] A. Romano, Y. Zheng, and W. Wang, “Minerray: Semantics-aware analysis for ever-evolving cryptojacking detection,” in *Proceedings of the 35th IEEE/ACM International Conference on Automated Software Engineering*, pp. 1129–1140, 2020.
- [31] F. N. Naseem, A. Aris, L. Babun, E. Tekiner, and A. S. Uluagac, “Minos: A lightweight real-time cryptojacking detection system,” in *NDSS*, 2021.
- [32] W. Wang, B. Ferrell, X. Xu, K. W. Hamlen, and S. Hao, “Seismic: Secure in-lined script monitors for interrupting cryptojacks,” in *Computer Security*:

- 23rd European Symposium on Research in Computer Security, ESORICS 2018, Barcelona, Spain, September 3-7, 2018, Proceedings, Part II 23*, pp. 122–142, Springer, 2018.
- [33] J. D. P. Rodriguez and J. Posegga, “Rapid: Resource and api-based detection against in-browser miners,” in *Proceedings of the 34th Annual Computer Security Applications Conference*, pp. 313–326, 2018.
 - [34] A. Kharraz, Z. Ma, P. Murley, C. Lever, J. Mason, A. Miller, N. Borisov, M. Antonakakis, and M. Bailey, “Outguard: Detecting in-browser covert cryptocurrency mining in the wild,” in *The World Wide Web Conference*, pp. 840–852, 2019.
 - [35] S. Cao, N. He, Y. Guo, and H. Wang, “A general static binary rewriting framework for webassembly,” *arXiv preprint arXiv:2305.01454*, 2023.
 - [36] A. Romano, D. Lehmann, M. Pradel, and W. Wang, “Wobfuscator: Obfuscating javascript malware via opportunistic translation to webassembly,” in *2022 2022 IEEE Symposium on Security and Privacy (SP) (SP)*, (Los Alamitos, CA, USA), pp. 1101–1116, IEEE Computer Society, may 2022.
 - [37] N. Loose, F. Mächtle, C. Pott, V. Bezsmertnyi, and T. Eisenbarth, “Madvex: Instrumentation-based Adversarial Attacks on Machine Learning Malware Detection,” *arXiv e-prints*, p. arXiv:2305.02559, May 2023.
 - [38] S. Cao, N. He, Y. Guo, and H. Wang, “WASMixer: Binary Obfuscation for WebAssembly,” *arXiv e-prints*, p. arXiv:2308.03123, Aug. 2023.
 - [39] D. Chen and W3C group, “WebAssembly documentation: Security.” <https://webassembly.org/docs/security/>, 2020. Accessed: 18 June 2020.
 - [40] D. Genkin, L. Pachmanov, E. Tromer, and Y. Yarom, “Drive-by key-extraction cache attacks from portable code,” *IACR Cryptol. ePrint Arch.*, vol. 2018, p. 119, 2018.
 - [41] Q. Stiévenart, C. De Roover, and M. Ghafari, “Security risks of porting c programs to webassembly,” in *Proceedings of the 37th ACM/SIGAPP Symposium on Applied Computing, SAC ’22*, (New York, NY, USA), p. 1713–1722, Association for Computing Machinery, 2022.
 - [42] LLVM, “The LLVM Compiler Infrastructure.” <https://llvm.org/>, 2003.
 - [43] B. Cox, D. Evans, A. Filipi, J. Rowanhill, W. Hu, J. Davidson, J. Knight, A. Nguyen-Tuong, and J. Hiser, “N-variant systems: a secretless framework for security through diversity,” in *Proc. of USENIX Security Symposium, USENIX-SS’06*, 2006.